

Remarks

Reconsideration of the above-identified application is respectfully requested. Claims 1-20 are pending in this application.

In the October 5, 2005 Office Action, the Examiner rejected claims 1-20 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 6,087,930 ("the '930 patent"). The Applicants respectfully traverse that rejection for the reasons set forth in detail below.

Rejection of Claims 1-20 Under 35 U.S.C. §102(b)

As noted above, the Examiner rejected claims 1-20 under §102(b) in view of the '930 patent. The Applicants believe, however, that those claims are not anticipated by that reference.

More particularly, one embodiment of the Applicants' claimed tire monitor is described in the specification in connection with Figure 2:

A controller (32) is provided in communication with transmitter (30) and with a receiver (34). Controller (32) preferably comprises a microprocessor, which preferably includes a storage device or memory, such as a read-only memory (ROM) and/or any type of random access memory (RAM). According to one embodiment of the present invention, controller (32) is for storing a plurality of manufacturers' codes. As previously described, in existing TPM systems, manufacturers' codes may be used to identify a signal format including any number of characteristics, such as carrier frequency, modulation scheme, data format and/or encryption technique, for wireless signals (18).

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In any event, program signal (36) is for use in selecting one of the plurality of manufacturers' codes according to which wireless signal (18) will be transmitted by transmitter (30). That is, prior to or upon installation of monitor (16) in a vehicle tire, program signal (36) is sent to receiver (34), such as by a technician, either via remote transmitter (38) or external interface (40). In this embodiment, program signal (36) includes a command for use by controller (32) to select one of the plurality of stored manufacturers' codes.

Subsequently, during operation of the TPM system, controller (32) controls transmitter (30) to transmit wireless signal (18) according to the signal

format indicated by the selected manufacturers' code. As previously described, signal formats for wireless signal (18) may include characteristics such as carrier frequency, modulation scheme, data format, encryption technique and/or other characteristics. In that regard, with reference again to FIGURE 1, receiver (24) for on-board controller (20) is configured to receive wireless signals (18) having the signal format of the selected one of the plurality of manufacturers' codes.

Alternatively, rather than storing a plurality of manufacturers' codes, controller (32) may be used to store a particular manufacturer's code received via program signal (36). In that regard, controller (32) may store a base code, and a program signal (36) sent to receiver (34), such as by a technician via remote transmitter (38) or external interface (40), includes a particular manufacturers' code for storage by controller (32). Subsequently, during operation of the TPM system, controller (32) controls transmitter (30) to transmit wireless signal (18) according to the signal format indicated by the particular manufacturers' code.

In either embodiment, rather than being specially configured to operate in a particular TPM system, tire monitor (16) is universal. That is, tire monitor (16) has the ability to transmit wireless signal (18) according to any signal format, and can therefore be programmed to operate in any TPM system.

(Specification, p. 6, l. 24 - p. 8, l. 14.)

Another embodiment of the Applicants' claimed tire monitor is described in the specification in connection with Figure 3:

A controller (32) is again provided in communication with transmitter (30). Controller (32) preferably comprises a microprocessor, which preferably includes a storage device or memory, such as a read-only memory (ROM) and/or any type of random access memory (RAM). Controller (32) is for storing a plurality of manufacturers' codes. As previously described, in existing TPM systems, manufacturers' codes may be used to identify a signal format including any number of characteristics, such as carrier frequency, modulation scheme, data format and/or encryption technique, for wireless signals (18).

In this embodiment, during operation of the TPM system, controller (32) controls transmitter (30) to transmit a series of wireless signals (18). Each one of the series of wireless signals (18) is transmitted by transmitter (30) according to the signal format indicated by a different one of the plurality of manufacturers' codes. In such a fashion, a wireless signal (18) is transmitted by transmitter (30) for every type of TPM system. With reference again to FIGURE 1, the control module (20) on-board vehicle (12), including receiver (24), recognizes one of the series of wireless signals (18) from transmitter (30),

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Once again, rather than being specially configured to operate in a particular TPM system, tire monitor (16) is universal. That is, tire monitor (16) transmit wireless signals (18) according to a plurality of signal formats for every type of TPM system, and therefore operates in all TPM systems.

(Specification, p. 9, l. 6 - p. 10, l. 5.)

Accordingly, the Applicants' claimed invention is directed to a universal tire monitor. As set forth in independent claim 1, the monitor comprises a sensor for sensing tire pressure, and a storage device for storing a plurality of codes, each code comprising at least a data format. The monitor further comprises a transmitter for transmitting a wireless signal including data representing the sensed tire pressure, wherein the wireless signal is transmitted by the transmitter according to at least one of the stored plurality of codes.

As set forth in independent claim 11, the monitor comprises a sensor for sensing tire pressure, and a receiver for receiving a program signal, the program signal comprising one of a plurality of codes, each code comprising at least a data format. The monitor further comprises a transmitter for transmitting a wireless signal including data representing the sensed tire pressure, wherein the wireless signal is transmitted according to the one of the plurality of codes received by the receiver.

As set forth in independent claim 19, the monitor comprises a sensor for sensing tire pressure, and a storage device for storing a plurality of codes, each code comprising at least a data format. The monitor further comprises a transmitter in communication with the sensor and the storage device, the transmitter for transmitting a series of wireless signals including data representing the sensed tire pressure, wherein each of the series of wireless signals is transmitted according to a different one of the stored plurality of codes.

The '930 patent is directed to an active integrated circuit transponder and sensor apparatus for transmitting vehicle tire parameter data. In contrast to the tire monitor of the Applicants' claimed invention, the transponder of the '930 patent is not universal. That transponder does not store a plurality of codes, where wireless tire parameter signals are

transmitted according to one or more of the plurality of codes. Neither does that transponder receive one of a plurality of codes, where wireless tire parameter signals are transmitted according to the one of the plurality of codes received. Instead, the '930 transponder is specially configured to transmit such wireless signals according to the specific signal format set forth in its control program. While such wireless signals include data representing a unique tire identification code, this is not the same as the Applicants' claimed plurality of codes according to one or more of which a wireless signal is transmitted. (*See*, '930 Patent, col. 5, ll. 20-31.)

Thus, in contrast to independent claim 1, '930 patent fails to teach or suggest a storage device for storing a plurality of codes, each code comprising at least a data format, or a transmitter for transmitting a wireless signal according to one of the stored plurality of codes. Similarly, in contrast to independent claim 19, the '930 patent fails to teach or suggest a storage device for storing a plurality of codes, each code comprising at least a data format, or a transmitter for transmitting a series of wireless signals, each according to a different one of the stored plurality of codes. Still further, in contrast to independent claim 11, the '930 patent fails to teach or suggest a receiver for receiving a program signal, the program signal comprising one of a plurality of codes, each code comprising at least a data format, or a transmitter for transmitting a wireless signal according to the one of the plurality of codes received by the receiver.

As a result, for at least these reasons, the Applicants believe that independent claims 1, 11 and 19 are not anticipated by the '930 patent. Reconsideration of the Examiners rejection of those claims under 35 U.S.C. §102(b) is therefore respectfully requested.

Claims 2-10, 12-18 and 20 depend either directly or indirectly from independent claims 1, 11 and 19, respectively, and include the limitations thereof. As a result, for at least the reasons set forth above concerning independent claims 1, 11 and 19, the Applicants believe that claims 2-10, 12-18 and 20 likewise overcome the Examiner's rejection thereof under §102(b), and reconsideration of that rejection is also respectfully requested.

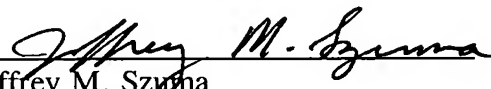
CONCLUSION

For at least the foregoing reasons, the Applicants believe that claims 1-20 meet both the formal and substantive requirements for patentability, and that the application is in condition for allowance. Accordingly, such action by the Examiner is respectfully requested.

If a telephone conference would expedite allowance or resolve any further questions, such a call is invited at the Examiner's convenience.

Respectfully submitted,

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Date: January 18, 2006

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